

## HYALURONAN IN HEMATOLOGIC MALIGNANCIES

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The involvement of hyaluronan (HA) and HA receptor (RHAMM) in hematopoietic processes of mobilization and trafficking of hematopoietic progenitor cells (CD34+) was investigated in patients bearing lymphoma (n=24), multiple myeloma (MM) (n=16) or leukemia (n=5), and healthy donors (n=18). HA was measured in sera and BM fragments by a non-competitive fluorometric Elisa-like assay and RHAMM by flow cytometry using anti-CD44 in BM aspirates. HA in BM biopsies was also analyzed by histochemistry. Patients and donors received mobilization therapy with G-CSF that increases the CD34+ cells proliferation. No changes in HA and RHAMM were observed prior to mobilization, except for MM patients, where a parallel increase in RHAMM and HA was noticed. On the other hand, after mobilization higher levels of HA and RHAMM were observed for lymphoma, MM and leukemia patients. For the donors this increase is more subtle. Interestingly, it was observed that the level of serum HA was lower in all patients, including, health donors, that exhibit good mobilization (>15 CD34+/mm<sup>3</sup>). HA seems to play an important role in mobilization and trafficking of hematopoietic progenitor cells. The knowledge of processes that involve HA and RHAMM can help to understand ECM alterations, adhesion and cellular migration in patients with BM initially compromised by clonal cells, enlightening answers to BM autologous transplantation. (FAPESP, CNPq, CAPES).